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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,659	10/21/2005	Jun Matsukawa	A3-072 US	1655

7590  
Stacey E Caldwell  
Molex Incorporated  
2222 Wellington Court  
Lisle, IL 60532

02/09/2007

EXAMINER
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CHAMBERS, TRAVIS SLOAN

ART UNIT	PAPER NUMBER
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2833

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/529,659

Applicant(s)

MATSUKAWA ET AL.

Examiner

Travis Chambers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. ( 6394843 ) in view of Juret et al. (5013255).

In reference to claim 1, Chang, et al. teaches of a memory card connector having an interior cavity (card receiving cavity 29, Fig. 3) for receiving a memory card, an insulating housing (insulating frame 20, Fig. 10) having rear terminal mounting section (transverse bar 21, Fig. 1) at the rear of the cavity, at least one longitudinal side wall section ( perpendicular arms 22 and 23, Fig. 1) extending forwardly from one end of the rear section at one side of the cavity, the longitudinal side wall section including a distal end, the housing having a bottom surface (bottom metal shell 30, Fig. 1) for mounting on a circuit board and a longitudinal side wall section having a top surface, opposite said bottom surface; a plurality of terminals mounted on the rear terminal-mounting section of the housing having contact portions (terminals 40, Fig. 1) for engaging contacts on the memory card, a metal shell (top metal shell 10, Fig. 1) covering substantially the entire area defined by the insulating housing and including a cover plate overlying at least a portion

of the longitudinal side wall section of the housing, an engaging structure including an engaging projection (locking member 27, Fig. 1) in the cover plate of the metal shell to prevent relative movement there between in a plane generally parallel to the cover plate and top surface.

However Chang does not teach the engaging projection and the engaging opening are on the top surface of the side wall section of the housing.

It is known in the art of rearrangement of parts to arrange the placement of the engaging projection and the engaging opening to the top surface as defined by applicants claim language. Juret is an example where the engaging projection (109 ; figure 1 ) and the engaging opening ( corresponding mating hole found on 100 ; figure 1) are on the top surface ( top portion of 20 ; figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the location of the engaging projection and the engaging hole to the top surface , since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

One skilled in the art would have been motivated to choose such a location to in order to make it easier for the assembly worker to see were to put the metal cover and thus make the assembly easier to manufacture.

Further neither Chang or Juret are explicit as to the clearance between the diameter of the engaging projection and the diameter of the engaging hole.

It is known in the art to change the size of either the engaging hole or the engaging projection.

It would have been obvious at the time of the claimed invention to change the size of the engaging hole or engaging pin, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 and (CCPA 1955), In re Dailey, 149 USPQ 47 (CCPA 1976).

One skilled in the art would have been motivated to change the size of the engaging projection or the engaging hole to have clearance in order to make it easier to place the cover plate (100 of Juret) onto the base and thus make the assembly easier to manufacture.

In reference to claim 2, Changl et al. teaches the terminal mounting section (transverse bar 21, Fig. 1) extending transversely across the rear of the cavity (card receiving space 29, Fig. 1), the engaging projection (locking elements 37, Fig. 1) being near the distal end of the side wall section projecting thereof for engagement in an engaging opening in the cover plate of the metal shell.

Although Matsukawa teaches of an L-shaped insulating housing Chang, et al. teaches of an insulating frame having two perpendicular arms. However, this arrangement may be considered generally L-shaped, as required by the claim.

In reference to claim 3, Chang, et al. teaches the insulating housing (insulating frame 20, Fig. 10) is generally U-shaped with the terminal-mounting section (transverse bar 21, Fig. 1) extending transversely across the rear of the cavity and including two of the longitudinal side wall sections (perpendicular arms 22 and 23, Fig. 1) extending from both opposite ends of the rear section and including one of the engaging projections

(locking arms 37, Fig. 1) near the distal end of each side wall section projecting thereof into a respective engaging opening (locking holes 17, Fig. 1) in the cover plate of the metal shell.

In reference to claim 4, Chang, et al. teaches of the metal securing nail (solder ends 25, Fig. 1) fixed to the insulating housing (insulating frame 20, Fig. 1) and having a foot portion for securing to an appropriate mounting pad on the circuit board.

In reference to claim 5, Chang, et al. teaches metal securing nail (solder ends 25, Fig. 1) is fixed to the housing adjacent to the engaging structure (locking member 27, Fig. 1).

### ***Response to Arguments***

- Applicant's arguments filed in response to the previous office action have been considered, but they are moot in view of the new grounds of rejection.
- Applicant's remarks are considered to be fully addressed in the above rejection.

### ***Allowable Subject Matter***

- Claim(s) 6 has(have) allowable subject matter.
- Claim(s) 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- The following is a statement of reasons for the indication of allowable subject matter: The prior art does not show the unique structure of the metal shell includes a grounding tab

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formed into engagement with the metal securing nail to provide a ground potential. This structure, in combination with all the other elements of the claim is not seen to be anticipated by the prior art and the examiner knows of no permissible motivation to combine the prior art such that the subject matter as a whole would have been obvious at the time the invention was made.

- If the application becomes allowable, any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowable Subject Matter".

### ***Conclusion***

- ☐ The prior art listed on PTO form 892 that is made of record and not relied upon is considered pertinent to applicant's disclosure because it shows the state of the art with respect to applicant's claimed invention.
- ☐ Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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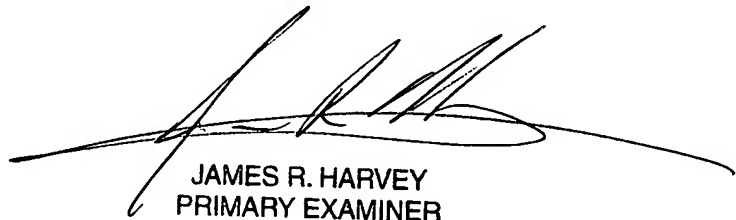
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis Chambers whose telephone number is 571-272-6813. The examiner can normally be reached on Monday-Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on 571-272-2001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Travis Chambers  
TC  
2/1/2007



JAMES R. HARVEY  
PRIMARY EXAMINER